trative growth into the deeper tissues than those of the cervix and uterus. Distant metastases are infrequent and late and as a rule do not contain heterogeneous tissue. Clinically it is difficult to differentiate these growths from other malignant tumors of the uterus. The most common symptom is irregular and profuse bleeding; frequently there is a vaginal discharge, which at first is watery or blood tinged, later becomes purulent and offensive. A positive diagnosis can only be made microscopically and when the diagnosis has been made with certainty, the prognosis is generally considered unfavorable.

Radium Treatment of Menorrhagia.—The management of the profuse menstruation in those cases in which no gross lesion is found, or in cases in which a small myoma exists, has not in the past been especially satisfactory. In some instances young persons respond to glandular medication, such as ovarian and thyroid extract and pituitrin and a few patients have improved after blood transfusion, and following the use of horse serum, but the effect, as a rule, has been that of temporary relief only. Curettement is seldom effective and should be tried only after medical treatment has failed. This type of menorrhagia in older persons has usually been treated by local medication and repeated curettements. In many of the cases in which a myoma is found, the conservative surgeon hesitates to submit the patient to so radical a procedure as a hysterectomy or even a myomectomy and in such cases radium should always be considered. STACY (*Minnesota Medicine,* 1919, ii, 88) has summarized the experiences with radium under these conditions as found in the Mayo Clinic, where this element has been used in 1915 in the treatment of the menorrhagia of the menopause, in cases which presented no gross pelvic lesion, and in those presenting a fibroid but with contra-indication to operation. Since then the types of cases treated have been increased, and now radium is considered the treatment of choice in all cases of the menorrhagia of the menopause in which the presence of carcinoma is definitely excluded, either by history or by a diagnostic curettement, and in those cases not presenting a large, soft myoma which is apt to later undergo degeneration. The radium is also used in cases of profuse menstruation of the young woman (1) when there is a small submucous fibroid, (2) when no gross pathological condition is demonstrable, and (3) in cases presenting a large myoma in which there is a definite surgical risk. However, they have not entirely replaced myomectomy with radium for the treatment of myomas in the patients between the ages of thirty and forty years. Of the 175 patients that were treated with radium from August, 1915, to December, 1917, there were 2 under twenty years of age, 34 from twenty-one to thirty years, 45 from thirty-one to forty, 91 from forty-one to fifty, and 14 were more than fifty years of age. Of this number 93 had had previous curettements, 37 had had more than one curettement, and 56 had undergone other pelvic operations. In 69 cases there were complications that were considered as relative, though not in every instance absolute contra-indications to operation. There were heart lesions in 34 cases, hypertension in 8, kidney lesion in 11, obesity in 8, and pulmonary tuberculosis in 6. Seventy-seven of the 175 cases had definitely palpable fibroids and it is interesting to note that 155 of the 175 patients were married women, and that of these only 25 had not been pregnant. The dosage of radium is gauged by the age of the patient, and by the presence or absence of a tumor. In the young person without a demonstrable tumor and when it is desirable to continue menstruation, usually one application of 50 mg. of radium element for from four to six hours is used. In older persons in whom it is desirable to stop menstruation entirely, it has been found that an exposure of 50 mg. for from ten to twelve hours has brought about the desired results. In cases in which large dosage is used, menstruation is usually irregular for about two months and ceases entirely after the second or third month; following the lighter exposures, it becomes regular and normal in most instances in about two months. It is the custom in the Mayo Clinic not to repeat the treatment until an interval of three months has elapsed. If, after that time, menorrhagia continues, a second treatment is given, and with the exception of one case, the second treatment has been effective. In this instance menstruation ceased for one year, and then became profuse and the periods prolonged. It has been necessary to give second treatments in 10 instances in this series. In 8 instances a hysterectomy was done later, but only one of these 8 patients had been given a second radium treatment. Included in this series is one case of adenomyoma of the uterus, in which a microscopic diagnosis was made at the time of the exploratory incision, but the tumor entirely disappeared after one intrauterine and four abdominal treatments. Reports have been received from 143 of the 175 patients and in 55 (38.5 per cent.) menstruation had ceased, not to return to the date of the report. In only 14 patients did menstruation cease immediately following the treatment. In 15 menstruation ceased for three months and returned, in 29 (20 per cent.) the menstruation became normal; in 42 it was reported as regular but somewhat profuse and in 30 it became profuse. Ninety-two patients reported their condition as improved, and 27 as not improved.

Cost of Cancer in Norway.—The various disasters to which death and disease give rise have an economic side, which occasionally makes itself strongly apparent. GADE (*Jour. Cancer Research*, 1919, iv, 203) has therefore tried to calculate the economic losses to Norway brought about by deaths from the cancerous diseases (carcinoma and sarcoma) in that country. These calculations are based on the one side upon the mortality statistics and on the other upon the valuation of Norwegian lives as computed by the director of the Norwegian Statistical State Bureau. As a result of this study it appears that there is an average yearly loss through death from cancer of about $1,800,000 in this country where the population is scarcely 2,500,000 inhabitants. This amount represents only the direct loss of life-capital, and must be considerably increased if other sources of economic loss through the diseases in question are to be considered.

Renal Pain.—Kidney pain is one of the commonest complaints with which the urologist is confronted and it is of great interest to the gynecologist as well. The pain may be localized in the loin or abdomen or radiate widely, and frequently neither the Roentgen ray nor urine analysis will give any clue. In order to determine the causes of renal pain, HARRIS (*Med. Jour.*, Australia, 1919, i, 41) has analyzed and studied 170 of his cases which presented this symptom and found that in